# Package 'IMD'

September 2, 2022

**Type** Package

**Title** Index of Multiple Deprivation Data for the UK

**Version** 1.2.1

**Description** Index of Multiple Deprivation for UK nations at various
geographical levels. In England, deprivation data is for Lower Layer Super
Output Areas, Middle Layer Super Output Areas, Wards, and Local Authorities
based on data from <https:
//www.gov.uk/government/statistics/english-indices-of-deprivation-2019>.
In Wales, deprivation data is for Lower Layer Super Output Areas, Middle
Layer Super Output Areas, Wards, and Local Authorities based on data from
<https:
//gov.wales/welsh-index-multiple-deprivation-full-index-update-ranks-2019>.
In Scotland, deprivation data is for Data Zones, Intermediate Zones, and
Council Areas based on data from <https://simd.scot>. In Northern Ireland,
deprivation data is for Super Output Areas and Local Government Districts
based on data from <https://www.nisra.gov.uk/statistics/deprivation/
northern-ireland-multiple-deprivation-measure-2017-nimdm2017>.
The 'IMD' package also provides the composite UK index developed by
<https://github.com/mysociety/composite_uk_imd>.

**License** MIT + file LICENSE

**URL** https://github.com/matthewgthomas/IMD

**BugReports** https://github.com/matthewgthomas/IMD/issues

**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 7.2.1

**Imports** rlang, dplyr, readr, tibble, janitor

**Suggests** testthat (>= 3.0.0)

**Config/testthat/edition** 3

**Depends** R (>= 4.1.0)

**NeedsCompilation** no

**Author** Matthew Gwynfryn Thomas [cre, aut, cph],
     Mike Page [aut]

**Maintainer** Matthew Gwynfryn Thomas <matthewgthomas@gmail.com>

**Repository** CRAN

**Date/Publication** 2022-09-02 08:10:15 UTC

# R topics documented:

---

aggregate_scores          *Aggregate deprivation scores*

---

### Description

Aggregate deprivation scores into higher-level geographies, calculating: - proportion of highly deprived areas - extent (proportion of the local population that live in the most deprived areas) - population-weighted average score

## Usage

```
aggregate_scores(
  data,
  score_col,
  rank_col,
  decile_col,
  higher_level_geography,
  population
)
```

## Arguments

| | |
|---|---|
| data | Data frame containing a variable to be aggregated, lower level geography population estimates, and a higher level geographical grouping variable |
| score_col | Variable containing deprivation scores |
| rank_col | Variable containing deprivation ranks |
| decile_col | Variable containing deprivation deciles |
| higher_level_geography | |
| | Name of the variable in the data frame containing the higher level geography names/codes |
| population | Name of the variable in the data frame containing the population estimates of the lower level geography |

## Value

A tibble containing population-weighted average scores, proportions of highly deprived areas, and the extent for the higher-level geography.

---

| calculate_extent | *Extent* |
|---|---|

---

## Description

extent calculates 'extent' scores when aggregating up small areas.

## Usage

```
calculate_extent(data, var, higher_level_geography, population)
```

## Arguments

| | |
|---|---|
| data | Data frame containing a variable to be aggregated, lower level geography population estimates, and a higher level geographical grouping variable |
| var | Name of the variable in the data frame containing the variable to be aggregated (e.g. rank) for the lower level geography |

`higher_level_geography`
> Name of the variable in the data frame containing the higher level geography names/codes

`population`    Name of the variable in the data frame containing the population estimates of the lower level geography

### Details

"Extent" is the proportion of the local population that live in areas classified as among the most deprived in the higher geography. The calculation of extent is taken from the IMD technical report Appendix N:

"The population living in the most deprived 11 to 30 per cent of Lower-layer Super Output Areas receive a sliding weight, ranging from 0.95 for those in the most deprived eleventh percentile, to 0.05 for those in the most deprived thirtieth percentile. In practice this means that the weight starts from 0.95 in the most deprived eleventh percentile, and then decreases by (0.95-0.05)/19 for each of the subsequent nineteen percentiles until it reaches 0.05 for the most deprived thirtieth percentile, and zero for areas outside the most deprived 30 per cent"

---

`calculate_pop_weighted_score`
*Population-weighted scores*

---

### Description

Calculate population-weighted scores within small areas.

### Usage

```
calculate_pop_weighted_score(data, var, higher_level_geography, population)
```

### Arguments

`data`          Data frame containing a variable to be aggregated, lower level geography population estimates, and a higher level geographical grouping variable

`var`           Name of the variable in the data frame containing the variable to be aggregated (e.g. rank) for the lower level geography

`higher_level_geography`
> Name of the variable in the data frame containing the higher level geography names/codes

`population`    Name of the variable in the data frame containing the population estimates of the lower level geography

---

calculate_proportion    *Proportion*

---

### Description

Calculate proportion of small areas in the higher-level geography that are within the 10

### Usage

```
calculate_proportion(data, var, higher_level_geography, max_quantile = 1)
```

### Arguments

| | |
|---|---|
| data | Data frame containing a variable to be aggregated, lower level geography population estimates, and a higher level geographical grouping variable |
| var | Name of the variable in the data frame containing the variable to be aggregated (e.g. decile) for the lower level geography |
| higher_level_geography | |
| | Name of the variable in the data frame containing the higher level geography names/codes |
| max_quantile | Get proportion of small areas categorised as less than or equal to 'max_quantile' (default = 1) |

---

cni_england_ward17    *Community Needs Index and Left Behind Areas for Wards (2017 codes) in England*

---

### Description

A data set containing the Community Needs Index scores and ranks and its three domains. Also highlights which areas are categorised as 'Left Behind'.

### Usage

```
cni_england_ward17
```

### Format

A data frame of class "tbl" with 7433 rows and 13 variables:

**ward17_code** Ward code

**ward17_name** Ward name

**lad19_code** Local Authority code

**lad19_name** Local Authority name

**Civic Assets score**  Score for the Civic Assets domain (higher score = higher needs)

**Civic Assets rank**  Rank for the Civic Assets domain (1 = highest needs)

**Connectedness score**  Score for the Connectedness domain (higher score = higher needs)

**Connectedness rank**  Rank for the Connectedness domain (1 = highest needs)

**Engaged community score**  Score for the Engaged Community domain (higher score = higher needs)

**Engaged community rank**  Rank for the Engaged Community domain (1 = highest needs)

**Community Needs Index score**  Overall Community Needs Index score (higher score = higher needs)

**Community Needs Index rank**  Overall Community Needs Index rank (1 = highest needs)

**Left Behind Area?**  TRUE if this Ward is a Left Behind Area ...

### Source

[https://ocsi.uk/](https://ocsi.uk/)

---

cni_northern_ireland_soa11

*Community Needs Index and Left Behind Areas for Super Output Areas (2011 codes) in Northern Ireland*

---

### Description

A data set containing the Community Needs Index scores and ranks and its three domains. Also highlights which areas are categorised as 'Left Behind'.

### Usage

```
cni_northern_ireland_soa11
```

### Format

A data frame of class "tbl" with 890 rows and 13 variables:

**soa11_code**  Super Output Area code

**soa11_name**  Super Output Area name

**lgd14_name**  Local Government District name

**lgd14_code**  Local Government District code

**Civic Assets score**  Score for the Civic Assets domain (higher score = higher needs)

**Civic Assets rank**  Rank for the Civic Assets domain (1 = highest needs)

**Connectedness score**  Score for the Connectedness domain (higher score = higher needs)

**Connectedness rank**  Rank for the Connectedness domain (1 = highest needs)

**Engaged Community score** Score for the Engaged Community domain (higher score = higher needs)

**Engaged Community rank** Rank for the Engaged Community domain (1 = highest needs)

**Community Needs Index score** Overall Community Needs Index score (higher score = higher needs)

**Community Needs Index rank** Overall Community Needs Index rank (1 = highest needs)

**Left Behind Area?** TRUE if this Ward is a Left Behind Area ...

## Source

[https://ocsi.uk/](https://ocsi.uk/)

---

| | |
|---|---|
| cni_scotland_iz11 | *Community Needs Index and Left Behind Areas for Intermediate Zones (2011 codes) in Scotland* |

---

## Description

A data set containing the Community Needs Index scores and ranks and its three domains. Also highlights which areas are categorised as 'Left Behind'.

## Usage

```
cni_scotland_iz11
```

## Format

A data frame of class "tbl" with 1,279 rows and 11 variables:

**iz11_code** Intermediate Zone code

**iz11_name** Intermediate Zone name

**Civic Assets score** Score for the Civic Assets domain (higher score = higher needs)

**Civic Assets rank** Rank for the Civic Assets domain (1 = highest needs)

**Connectedness score** Score for the Connectedness domain (higher score = higher needs)

**Connectedness rank** Rank for the Connectedness domain (1 = highest needs)

**Engaged Community score** Score for the Engaged Community domain (higher score = higher needs)

**Engaged Community rank** Rank for the Engaged Community domain (1 = highest needs)

**Community Needs Index score** Overall Community Needs Index score (higher score = higher needs)

**Community Needs Index rank** Overall Community Needs Index rank (1 = highest needs)

**Left Behind Area?** TRUE if this Ward is a Left Behind Area ...

## Source

[https://ocsi.uk/](https://ocsi.uk/)

---

| cni_wales_msoa11 | *Community Needs Index and Left Behind Areas for MSOAs (2011 codes) in Wales* |

---

## Description

A data set containing the Community Needs Index scores and ranks and its three domains. Also highlights which areas are categorised as 'Left Behind'.

## Usage

```
cni_wales_msoa11
```

## Format

A data frame of class "tbl" with 410 rows and 12 variables:

**msoa11_code** MSOA code

**msoa11_name** MSOA name

**lad21_name** Local Authority name

**Civic Assets score** Score for the Civic Assets domain (higher score = higher needs)

**Civic Assets rank** Rank for the Civic Assets domain (1 = highest needs)

**Connectedness score** Score for the Connectedness domain (higher score = higher needs)

**Connectedness rank** Rank for the Connectedness domain (1 = highest needs)

**Engaged Community score** Score for the Engaged Community domain (higher score = higher needs)

**Engaged Community rank** Rank for the Engaged Community domain (1 = highest needs)

**Community Needs Index score** Overall Community Needs Index score (higher score = higher needs)

**Community Needs Index rank** Overall Community Needs Index rank (1 = highest needs)

**Left Behind Area?** TRUE if this Ward is a Left Behind Area ...

## Source

<https://ocsi.uk/>

---

| imd_england_lad | *Index of Multiple Deprivation for Local Authorities in England* |
|---|---|

---

## Description

A data set containing aggregated scores and proportions for Local Authorities in England. Note that extents are not available.

## Usage

```
imd_england_lad
```

## Format

A data frame of class "tbl" with 317 rows and 18 variables:

**lad_code** LAD code

**Score** Population-weighted average score

**Proportion** Proportion of small areas in the nation's most deprived

**Extent** Extent for overall IMD

**Income_Score** Population-weighted average score for Income domain

**Income_Proportion** Proportion of most deprived areas for Income

**Employment_Score** Population-weighted average score for Employment domain

**Employment_Proportion** Proportion of most deprived areas for Employment

**Education_Score** Population-weighted average score for Education domain

**Education_Proportion** Proportion of most deprived areas for Education

**Health_Score** Population-weighted average score for Health domain

**Health_Proportion** Proportion of most deprived areas for Health

**Crime_Score** Population-weighted average score for Crime domain

**Crime_Proportion** Proportion of most deprived areas for Crime

**Housing_and_Access_Score** Population-weighted average score for Housing/Access domain

**Housing_and_Access_Proportion** Proportion of most deprived areas for Housing/Access domain

**Environment_Score** Population-weighted average score for Environment domain

**Environment_Proportion** Proportion of most deprived areas for Environment ...

## Source

[https://www.gov.uk/](https://www.gov.uk/)

---

imd_england_lad_subdomains

*Sub-domains of deprivation for Local Authorities in England*

---

**Description**

A data set containing deprivation sub-domain ranks and deciles for Local Authorities in England.

**Usage**

imd_england_lad_subdomains

**Format**

A data frame of class "tbl" with 317 rows and 13 variables:

**lad_code** Local Authority code

**Children_and_young_people_Proportion** Children and Young People sub-domain proportion

**Children_and_young_people_Extent** Children and Young People sub-domain extent

**Adult_skills_Proportion** Adult Skills sub-domain proportion

**Adult_skills_Extent** Adult Skills sub-domain extent

**Geographical_barriers_Proportion** Geographical Barriers sub-domain proportion

**Geographical_barriers_Extent** Geographical Barriers sub-domain extent

**Wider_barriers_Proportion** Wider Barriers sub-domain proportion

**Wider_barriers_Extent** Wider Barriers sub-domain extent

**Indoors_Proportion** Indoors sub-domain proportion

**Indoors_Extent** Indoors sub-domain extent

**Outdoors_Proportion** Outdoors sub-domain proportion

**Outdoors_Extent** Outdoors sub-domain extent ...

**Source**

https://www.gov.uk/

---

imd_england_lsoa          *Index of Multiple Deprivation for LSOAs in England*

---

### Description

A data set containing IMD ranks and deciles for Lower Layer Super Output Areas (LSOAs) in England.

### Usage

```
imd_england_lsoa
```

### Format

A data frame of class "tbl" with 32,844 rows and 17 variables:

**lsoa_code** LSOA code

**IMD_decile** IMD decile

**Income_decile** Income domain decile

**Employment_decile** Employment domain decile

**Education_decile** Education domain decile

**Health_decile** Health and Disability domain decile

**Crime_decile** Crime domain decile

**Housing_and_Access_decile** Housing and access to services domain decile

**Environment_decile** Environment domain decile

**IMD_rank** IMD rank

**Income_rank** Income domain rank

**Employment_rank** Employment domain rank

**Education_rank** Education domain rank

**Health_rank** Health domain rank

**Crime_rank** Crime domain rank

**Housing_and_Access_rank** Housing and access to services domain rank

**Environment_rank** Environment domain rank ...

### Source

<https://www.gov.uk/>

imd_england_lsoa_subdomains

*Sub-domains of deprivation for LSOAs in England*

### Description

A data set containing deprivation sub-domain ranks and deciles for Lower Layer Super Output Areas (LSOAs) in England.

### Usage

imd_england_lsoa_subdomains

### Format

A data frame of class "tbl" with 32,844 rows and 19 variables:

**lsoa_code** LSOA code

**Education_decile** Education domain decile

**Children_and_young_people_decile** Children and Young People sub-domain decile

**Adult_skills_decile** Adult Skills sub-domain decile

**Housing_and_Access_decile** Housing and access to services domain decile

**Geographical_barriers_decile** Geographical Barriers sub-domain decile

**Wider_barriers_decile** Wider Barriers sub-domain decile

**Environment_decile** Environment domain decile

**Indoors_decile** Indoors sub-domain decile

**Outdoors_decile** Outdoors sub-domain decile

**Education_rank** Education domain rank

**Children_and_young_people_rank** Children and Young People sub-domain rank

**Adult_skills_rank** Adult Skills sub-domain rank

**Housing_and_Access_rank** Housing and access to services domain rank

**Geographical_barriers_rank** Geographical Barriers sub-domain rank

**Wider_barriers_rank** Wider Barriers sub-domain rank

**Environment_rank** Environment domain rank

**Indoors_rank** Indoors sub-domain rank

**Outdoors_rank** Outdoors sub-domain rank ...

### Source

https://www.gov.uk/

---

imd_england_msoa        *Index of Multiple Deprivation for MSOAs in England*

---

### Description

A data set containing population-weighted average scores, proportions and extents for Middle Layer Super Output Areas (LSOAs) in England.

### Usage

```
imd_england_msoa
```

### Format

A data frame of class "tbl" with 6,791 rows and 25 variables:

**msoa_code** MSOA code

**Score** Population-weighted average IMD score

**Proportion** Proportion of small areas in the nation's most deprived

**Extent** Extent for overall IMD

**Income_Score** Population-weighted average score for Income domain

**Income_Proportion** Proportion of most deprived areas for Income

**Income_Extent** Extent for Income

**Employment_Score** Population-weighted average score for Employment domain

**Employment_Proportion** Proportion of most deprived areas for Employment

**Employment_Extent** Extent for Employment

**Education_Score** Population-weighted average score for Education domain

**Education_Proportion** Proportion of most deprived areas for Education

**Education_Extent** Extent for Education

**Health_Score** Population-weighted average score for Health domain

**Health_Proportion** Proportion of most deprived areas for Health

**Health_Extent** Extent for Health

**Crime_Score** Population-weighted average score for Crime domain

**Crime_Proportion** Proportion of most deprived areas for Crime

**Crime_Extent** Extent for Crime

**Housing_and_Access_Score** Population-weighted average score for Housing/Access domain

**Housing_and_Access_Proportion** Proportion of most deprived areas for Housing/Access domain

**Housing_and_Access_Extent** Extent for Housing/Access

**Environment_Score** Population-weighted average score for Environment domain

**Environment_Proportion** Proportion of most deprived areas for Environment

**Environment_Extent** Extent for Environment ...

**Source**

<https://www.gov.uk/>

---

imd_england_msoa_subdomains

*Sub-domains of deprivation for MSOAs in England*

---

**Description**

A data set containing deprivation sub-domain ranks and deciles for Middle Layer Super Output Areas (MSOAs) in England.

**Usage**

imd_england_msoa_subdomains

**Format**

A data frame of class "tbl" with 6,791 rows and 13 variables:

**msoa_code** MSOA code

**Children_and_young_people_Proportion** Children and Young People sub-domain proportion

**Children_and_young_people_Extent** Children and Young People sub-domain extent

**Adult_skills_Proportion** Adult Skills sub-domain proportion

**Adult_skills_Extent** Adult Skills sub-domain extent

**Geographical_barriers_Proportion** Geographical Barriers sub-domain proportion

**Geographical_barriers_Extent** Geographical Barriers sub-domain extent

**Wider_barriers_Proportion** Wider Barriers sub-domain proportion

**Wider_barriers_Extent** Wider Barriers sub-domain extent

**Indoors_Proportion** Indoors sub-domain proportion

**Indoors_Extent** Indoors sub-domain extent

**Outdoors_Proportion** Outdoors sub-domain proportion

**Outdoors_Extent** Outdoors sub-domain extent ...

**Source**

<https://www.gov.uk/>

---

| imd_england_ward | *Index of Multiple Deprivation for Wards in England* |

---

### Description

A data set containing population-weighted average scores, proportions and extents for wards in England.

### Usage

```
imd_england_ward
```

### Format

A data frame of class "tbl" with 7,180 rows and 25 variables:

**ward_code** Ward code

**Score** Population-weighted average IMD score

**Proportion** Proportion of small areas in the nation's most deprived

**Extent** Extent for overall IMD

**Income_Score** Population-weighted average score for Income domain

**Income_Proportion** Proportion of most deprived areas for Income

**Income_Extent** Extent for Income

**Employment_Score** Population-weighted average score for Employment domain

**Employment_Proportion** Proportion of most deprived areas for Employment

**Employment_Extent** Extent for Employment

**Education_Score** Population-weighted average score for Education domain

**Education_Proportion** Proportion of most deprived areas for Education

**Education_Extent** Extent for Education

**Health_Score** Population-weighted average score for Health domain

**Health_Proportion** Proportion of most deprived areas for Health

**Health_Extent** Extent for Health

**Crime_Score** Population-weighted average score for Crime domain

**Crime_Proportion** Proportion of most deprived areas for Crime

**Crime_Extent** Extent for Crime

**Housing_and_Access_Score** Population-weighted average score for Housing/Access domain

**Housing_and_Access_Proportion** Proportion of most deprived areas for Housing/Access domain

**Housing_and_Access_Extent** Extent for Housing/Access

**Environment_Score** Population-weighted average score for Environment domain

**Environment_Proportion** Proportion of most deprived areas for Environment

**Environment_Extent** Extent for Environment ...

**Source**

---

imd_england_ward_subdomains

*Sub-domains of deprivation for wards in England*

---

**Description**

A data set containing deprivation sub-domain ranks and deciles for wards in England.

**Usage**

```
imd_england_ward_subdomains
```

**Format**

A data frame of class "tbl" with 7,180 rows and 13 variables:

**ward_code** Ward code

**Children_and_young_people_Proportion** Children and Young People sub-domain proportion

**Children_and_young_people_Extent** Children and Young People sub-domain extent

**Adult_skills_Proportion** Adult Skills sub-domain proportion

**Adult_skills_Extent** Adult Skills sub-domain extent

**Geographical_barriers_Proportion** Geographical Barriers sub-domain proportion

**Geographical_barriers_Extent** Geographical Barriers sub-domain extent

**Wider_barriers_Proportion** Wider Barriers sub-domain proportion

**Wider_barriers_Extent** Wider Barriers sub-domain extent

**Indoors_Proportion** Indoors sub-domain proportion

**Indoors_Extent** Indoors sub-domain extent

**Outdoors_Proportion** Outdoors sub-domain proportion

**Outdoors_Extent** Outdoors sub-domain extent ...

**Source**

https://www.gov.uk/

imd_northern_ireland_lad

*Index of Multiple Deprivation for Local Government Districts in Northern Ireland*

## Description

A data set containing proportions and extents for Local Government Districts (Local Authorities) in Northern Ireland.

## Usage

imd_northern_ireland_lad

## Format

A data frame of class "tbl" with 11 rows and 25 variables:

**lad_code** LAD code

**Proportion** Proportion of small areas in the nation's most deprived

**Extent** Extent for overall IMD

**Income_Proportion** Proportion of most deprived areas for Income

**Income_Extent** Extent for Income

**Employment_Proportion** Proportion of most deprived areas for Employment

**Employment_Extent** Extent for Employment

**Education_Proportion** Proportion of most deprived areas for Education

**Education_Extent** Extent for Education

**Health_Proportion** Proportion of most deprived areas for Health

**Health_Extent** Extent for Health

**Crime_Proportion** Proportion of most deprived areas for Crime

**Crime_Extent** Extent for Crime

**Access_Proportion** Proportion of most deprived areas for Access domain

**Access_Extent** Extent for Access

**Environment_Proportion** Proportion of most deprived areas for Environment

**Environment_Extent** Extent for Environment ...

## Source

https://www.nisra.gov.uk/

---

imd_northern_ireland_soa

*Index of Multiple Deprivation for Super Output Areas in Northern Ireland*

---

### Description

A data set containing IMD ranks and deciles for SOAs in Northern Ireland.

### Usage

    imd_northern_ireland_soa

### Format

A data frame of class "tbl" with 890 rows and 17 variables:

**soa_code**  Super Output Area code

**IMD_decile**  IMD decile

**Income_decile**  Income domain decile

**Employment_decile**  Employment domain decile

**Health_decile**  Health and Disability domain decile

**Education_decile**  Education domain decile

**Access_decile**  Access to services domain decile

**Environment_decile**  Environment domain decile

**Crime_decile**  Crime domain decile

**IMD_rank**  IMD rank

**Income_rank**  Income domain rank

**Employment_rank**  Employment domain rank

**Health_rank**  Health domain rank

**Education_rank**  Education domain rank

**Access_rank**  Access to services domain rank

**Environment_rank**  Environment domain rank

**Crime_rank**  Crime domain rank ...

### Source

<https://www.nisra.gov.uk/>

---

| | |
|---|---|
| imd_scotland_dz | *Index of Multiple Deprivation for Data Zones in Scotland* |

---

### Description

A data set containing IMD ranks and deciles for Data Zones in Scotland

### Usage

```
imd_scotland_dz
```

### Format

A data frame of class "tbl" with 6,976 rows and 17 variables:

**dz_code** Data Zone code

**IMD_decile** IMD decile

**Income_decile** Income domain decile

**Employment_decile** Employment domain decile

**Education_decile** Education domain decile

**Health_decile** Health and Disability domain decile

**Crime_decile** Crime domain decile

**Housing_decile** Housing domain decile

**Access_decile** Access to services domain decile

**IMD_rank** IMD rank

**Income_rank** Income domain rank

**Employment_rank** Employment domain rank

**Education_rank** Education domain rank

**Health_rank** Health domain rank

**Crime_rank** Crime domain rank

**Housing_rank** Housing domain rank

**Access_rank** Access to services domain rank ...

### Source

<https://www.gov.scot/>

---

imd_scotland_iz        *Index of Multiple Deprivation for IZs in Scotland*

---

### Description

A data set containing proportions and extents for Intermediate Zones (IZs) in Scotland. Note that IMD scores for Scotland are not available.

### Usage

```
imd_scotland_iz
```

### Format

A data frame of class "tbl" with 1,279 rows and 17 variables:

**iz_code** Intermediate Zone code

**Proportion** Proportion of small areas in the nation's most deprived

**Extent** Extent for overall IMD

**Income_Proportion** Proportion of most deprived areas for Income

**Income_Extent** Extent for Income

**Employment_Proportion** Proportion of most deprived areas for Employment

**Employment_Extent** Extent for Employment

**Education_Proportion** Proportion of most deprived areas for Education

**Education_Extent** Extent for Education

**Health_Proportion** Proportion of most deprived areas for Health

**Health_Extent** Extent for Health

**Crime_Proportion** Proportion of most deprived areas for Crime

**Crime_Extent** Extent for Crime

**Housing_Proportion** Proportion of most deprived areas for Housing domain

**Housing_Extent** Extent for Housing

**Access_Proportion** Proportion of most deprived areas for Access domain

**Access_Extent** Extent for Access ...

### Source

<https://www.gov.scot/>

---

| imd_scotland_lad | *Index of Multiple Deprivation for Council Areas in Scotland* |
|---|---|

---

## Description

A data set containing proportions and extents for Council Areas (Local Authorities) in Scotland. Note that IMD scores for Scotland are not available.

## Usage

```
imd_scotland_lad
```

## Format

A data frame of class "tbl" with 32 rows and 17 variables:

**lad_code** Local Authority code

**Proportion** Proportion of small areas in the nation's most deprived

**Extent** Extent for overall IMD

**Income_Proportion** Proportion of most deprived areas for Income

**Income_Extent** Extent for Income

**Employment_Proportion** Proportion of most deprived areas for Employment

**Employment_Extent** Extent for Employment

**Education_Proportion** Proportion of most deprived areas for Education

**Education_Extent** Extent for Education

**Health_Proportion** Proportion of most deprived areas for Health

**Health_Extent** Extent for Health

**Crime_Proportion** Proportion of most deprived areas for Crime

**Crime_Extent** Extent for Crime

**Housing_Proportion** Proportion of most deprived areas for Housing domain

**Housing_Extent** Extent for Housing

**Access_Proportion** Proportion of most deprived areas for Access domain

**Access_Extent** Extent for Access ...

## Source

https://www.gov.scot/

---

imd_wales_lad *Index of Multiple Deprivation for Local Authorities in Wales*

---

### Description

A data set containing proportions and extents for Local Authorities in Wales. Note that IMD scores for Wales are not available.

### Usage

```
imd_wales_lad
```

### Format

A data frame of class "tbl" with 22 rows and 19 variables:

**lad_code** LAD code

**Proportion** Proportion of small areas in the nation's most deprived

**Extent** Extent for overall IMD

**Income_Proportion** Proportion of most deprived areas for Income

**Income_Extent** Extent for Income

**Employment_Proportion** Proportion of most deprived areas for Employment

**Employment_Extent** Extent for Employment

**Education_Proportion** Proportion of most deprived areas for Education

**Education_Extent** Extent for Education

**Health_Proportion** Proportion of most deprived areas for Health

**Health_Extent** Extent for Health

**Crime_Proportion** Proportion of most deprived areas for Crime

**Crime_Extent** Extent for Crime

**Housing_Proportion** Proportion of most deprived areas for Housing domain

**Housing_Extent** Extent for Housing

**Access_Proportion** Proportion of most deprived areas for Access domain

**Access_Extent** Extent for Access

**Environment_Proportion** Proportion of most deprived areas for Environment

**Environment_Extent** Extent for Environment ...

### Source

https://gov.wales/

---

imd_wales_lsoa                *Index of Multiple Deprivation for LSOAs in Wales*

---

### Description

A data set containing IMD ranks and deciles for Lower Layer Super Output Areas (LSOAs) in Wales.

### Usage

```
imd_wales_lsoa
```

### Format

A data frame of class "tbl" with 1,909 rows and 19 variables:

**lsoa_code** LSOA code

**IMD_decile** IMD decile

**Income_decile** Income domain decile

**Employment_decile** Employment domain decile

**Education_decile** Education domain decile

**Health_decile** Health and Disability domain decile

**Crime_decile** Crime domain decile

**Housing_decile** Housing domain decile

**Access_decile** Access to services domain decile

**Environment_decile** Environment domain decile

**IMD_rank** IMD rank

**Income_rank** Income domain rank

**Employment_rank** Employment domain rank

**Education_rank** Education domain rank

**Health_rank** Health domain rank

**Crime_rank** Crime domain rank

**Housing_rank** Housing domain rank

**Access_rank** Access to services domain rank

**Environment_rank** Environment domain rank ...

### Source

<https://gov.wales/>

---

imd_wales_msoa              *Index of Multiple Deprivation for MSOAs in Wales*

---

**Description**

A data set containing proportions and extents for Middle Layer Super Output Areas (LSOAs) in Wales. Note that IMD scores for Wales are not available.

**Usage**

```
imd_wales_msoa
```

**Format**

A data frame of class "tbl" with 410 rows and 28 variables:

**msoa_code** MSOA code
**Score** Population-weighted average IMD score
**Proportion** Proportion of small areas in the nation's most deprived
**Extent** Extent for overall IMD
**Income_Score** Population-weighted average income score
**Income_Proportion** Proportion of most deprived areas for Income
**Income_Extent** Extent for Income
**Employment_Score** Population-weighted average Employment score
**Employment_Proportion** Proportion of most deprived areas for Employment
**Employment_Extent** Extent for Employment
**Education_Score** Population-weighted average Education score
**Education_Proportion** Proportion of most deprived areas for Education
**Education_Extent** Extent for Education
**Health_Score** Population-weighted average Health score
**Health_Proportion** Proportion of most deprived areas for Health
**Health_Extent** Extent for Health
**Crime_Score** Population-weighted average Crime score
**Crime_Proportion** Proportion of most deprived areas for Crime
**Crime_Extent** Extent for Crime
**Housing_Score** Population-weighted average Housing score
**Housing_Proportion** Proportion of most deprived areas for Housing domain
**Housing_Extent** Extent for Housing
**Access_Score** Population-weighted average Access score
**Access_Proportion** Proportion of most deprived areas for Access domain
**Access_Extent** Extent for Access
**Environment_Score** Population-weighted average Environment score
**Environment_Proportion** Proportion of most deprived areas for Environment
**Environment_Extent** Extent for Environment ...

**Source**

<https://gov.wales/>

---

imd_wales_ward | *Index of Multiple Deprivation for Wards in Wales*

---

**Description**

A data set containing population-weighted average scores, proportions and extents for wards in Wales Note that IMD scores for Wales are not available.

**Usage**

```
imd_wales_ward
```

**Format**

A data frame of class "tbl" with 843 rows and 19 variables:

**ward_code** Ward code

**Proportion** Proportion of small areas in the nation's most deprived

**Extent** Extent for overall IMD

**Income_Proportion** Proportion of most deprived areas for Income

**Income_Extent** Extent for Income

**Employment_Proportion** Proportion of most deprived areas for Employment

**Employment_Extent** Extent for Employment

**Education_Proportion** Proportion of most deprived areas for Education

**Education_Extent** Extent for Education

**Health_Proportion** Proportion of most deprived areas for Health

**Health_Extent** Extent for Health

**Crime_Proportion** Proportion of most deprived areas for Crime

**Crime_Extent** Extent for Crime

**Housing_Proportion** Proportion of most deprived areas for Housing domain

**Housing_Extent** Extent for Housing

**Access_Proportion** Proportion of most deprived areas for Access domain

**Access_Extent** Extent for Access

**Environment_Proportion** Proportion of most deprived areas for Environment

**Environment_Extent** Extent for Environment ...

**Source**

<https://gov.wales/>

---

load_composite_imd            *Load composite 2020 UK Index of Multiple Deprivation*

---

### Description

Load data from mySociety's composite 2020 UK Index of Multiple Deprivation: https://github.com/mysociety/composite_uk

### Usage

```
load_composite_imd(nation = "E")
```

### Arguments

nation              The initial letter of the UK nation whose composite IMD you want to load.
                    Should be one of: (E)ngland, (W)ales, (S)cotland (N)orthern Ireland. See the
                    GitHub link about for more details about why there are separate composite IMDs
                    for each nation.

### Examples

```
## Not run:
imd_uk <- load_composite_imd("E")

## End(Not run)
```

# Index